



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/574,004

03/29/2006

Dario Parata

09952.0395

4085

22852

7590

03/26/2010

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP

901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

SHEDRICK, CHARLES TERRELL

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

03/26/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,004	Applicant(s) PARATA, DARIO	
	Examiner CHARLES SHEDRICK	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-36,38-50 and 52-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-36,38-50 and 52-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims **30-31, 33-36, 38-46, 48-50 and 52 -58** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sykes et al, US Patent Pub. No.: US Patent No.: 2002/0016169 A1, hereinafter, "**Sykes**", in view of Diacakis et al. US Patent Pub. No.: 2004/0185875 A1, hereinafter, "**Diacakis**" and further in view of Duffett-Smith et al. US Patent Pub. No.: 2003/0220117 A1, hereinafter, "Duffett-Smith".

Art Unit: 2617

Consider **Claims 30 and 45**, **Sykes teaches** a method of generating triggers for the provision of location based services in a mobile communication network supporting a plurality of mobile terminals over a given territory, comprising the steps of: defining a set of target areas within said territory (**i.e., The position of the mobile station terminal is continuously defined when it is in operation by location data that is a function of at least one base station**)(**e.g., at least the abstract , paragraph 0012, 0033 and 0044**), each target area in said set being identified by respective geographic data(**i.e., location data that is a function of a set of BS**)(**e.g., see paragraph 0037 and corresponding table**); transforming said geographic data in a respective set of values of network related entities(**i.e., mapping as noted in the table of paragraph 0037**)(**e.g., see also paragraphs 0012, 0034-0035 and 0039**), said respective set of values being expected to be associated with a mobile terminal of said mobile network when located in the corresponding target area(**e.g., the location data is compared and the feature is applied as noted in at least paragraphs 0014 -0015**); monitoring the values in said respective set as associated to at least one monitored mobile terminal in said mobile communication network(**i.e., The position of the mobile station terminal is continuously defined when it is in operation by location data that is a function of at least one base station**)(**e.g., at least the abstract , paragraph 0012, 0033 and 0044**); checking whether said values as monitored match with said set of values as expected to be encountered(**i.e., the location data is compared and the feature is applied as noted in at least paragraphs 0014 -0015 (see also paragraphs 0012-0021,0025)**); and when a match is found, which is indicative of said monitored mobile terminal being located in a given target area of said set, generating a trigger for prompting delivery of location based services related to said given target area in said set toward said monitored mobile

Art Unit: 2617

terminal(i.e., call fwding, ringers, and time adjustments are amongst the location based services that are triggered based on the operating parameter adjustments)(e.g., see paragraphs 0012-0021 and 0025).

However, Sykes does not specifically teach activating a set of location actions carried out by said mobile terminal or said mobile network, to improve the accuracy of the location of said mobile terminal being monitored within said given target area.

In analogous art, Diacakis teaches activating a set of location actions carried out by said mobile terminal or said mobile network, to improve the accuracy of the location of said mobile terminal being monitored within said given target area (i.e., **when an uncertainty associated with the area of the wireless unit overlaps one or more zones of interest, a second monitoring schedule may be implemented ...the rate and/or accuracy of the location monitoring may be increased...see at least paragraphs 0018**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Sykes to include activating a set of location actions carried out by said mobile terminal or said mobile network, to improve the accuracy of the location of said mobile terminal being monitored within said given target area for the purpose of monitoring the activities of wireless units for law enforcement purposes as taught by Diacakis in at least paragraph 0007.

However, Diacakis as modified by Sykes does not specifically teach geographic data weighted by margins of measurement accuracy.

Art Unit: 2617

In analogous art, Duffett-Smith teaches geographic data weighted by margins of measurement accuracy (**e.g., weights are assigned to measurement- abstract, paragraph 0010, 0012, 0033 and table 1**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Diacakis as modified by Sykes to includes geographic data weighted by margins of measurement accuracy for the purpose of improving measurement accuracy as taught by Duffett-Smith.

Consider **claims 31 and 46 and as applied to claims 30 and 45**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches wherein for each mobile terminal, said set of values includes at least one value selected among a power value, a time value or a cell identifier relative to a cell different from a cell serving said mobile terminal (**e.g., cell identifiers of BS as noted in at least paragraphs 0031-0033 and table 0037**).

Consider **claims 33 and 48 and as applied to claims 31 and 46**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches wherein said set of values comprises at least one value selected from location areas, routing areas, cell identifiers, and corresponding adjacent frequencies (**e.g., location areas as noted in at least paragraphs 0034-0035 and cell identifiers of BS as noted in at least paragraphs 0031-0033 and table 0037**).

Consider **claims 34 and 49 and as applied to claims 30 and 45**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches wherein said step of monitoring is carried out with said mobile terminal(**i.e., as best understood by the Examiner the monitoring is a cooperative effort in order to know when an event is triggered as noted in paragraph 0045 based on the location which can be provided via GPS in paragraph 0045**).

Art Unit: 2617

Consider **claims 35 and 50 and as applied to claims 30 and 45**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches wherein said step of checking is carried out with said mobile terminal(i.e., **checking to know when to apply a trigger. As best understood a cooperative effort with network and mobile**) (e.g., paragraphs 0043 and 0045).

Consider **claims 36 and as applied to claims 30**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches wherein said set of expected values comprises at least one entity external to said mobile network (e.g., **systems external to the telecommunications network as noted in paragraph 0044**).

Consider **claims 38 and as applied to claims 30**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches wherein said step of checking is carried at the network node level (e.g., **when the network detects a change in location area...see paragraph 0038 ...information can be sent via the telecommunication network 0039**).

Consider **claims 39 and 57 and as applied to claims 30 and any of claim 45**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches wherein said step of monitoring is carried at the network node level (e.g., **when the network detects a change in location area...see paragraph 0038 ...information can be sent via the telecommunication network 0039**).

Consider **claims 40 and 52 and as applied to claims 30 and 45**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches wherein said operation of transforming said geographic data is carried out at the network infrastructure level (e.g., **converting location data...see paragraph 0038**).

Art Unit: 2617

Consider **claims 41 and 53 and as applied to claims 30 and 45**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches wherein said operation of transforming said geographic data is carried out at the mobile terminal level (**e.g., see paragraphs 0039 can be entered directly or sent to the mobile via the network and table 0037**).

Consider **claims 42 and 54 and as applied to claims 30 and 45**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches wherein said step of providing location based services is carried out at the network infrastructure level (**i.e., call forwarding and local time adjustment**)(e.g., see paragraphs 0042 location based “services”).

Consider **claims 43 and 55 and as applied to claims 30 and 45**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches wherein said step of providing location based services is carried out at the mobile terminal level(**i.e., activation or deactivation of a ringer**) (e.g., see paragraphs 0042 location based “services” are provided in combination).

Consider **claims 44 and 56 and as applied to claims 33 and 55**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches the claimed invention comprising the step of providing communication facilities for permitting said monitored mobile terminal to receive information from at least one data base containing information related to said location base services (**i.e., mobile identity etc known in the art to be stored in the network of the figure and described in paragraph 0030**).

Consider **claims 58**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches a computer readable medium encoded with a computer program product loadable into a memory of at least one computer, the computer program product comprising software code portions capable of performing the steps of the method of any one of claims 30 to 36 and 38-

Art Unit: 2617

40(i.e., the above noted is hereby interpreted as a tangible medium and therefore the telecommunication network described in at least paragraph 0030 reads the above noted limitation).

4. Claims **32 and 47** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sykes et al, US Patent Pub. No.: US Patent No.: 2002/0016169 A1, hereinafter, "**Sykes**", in view of Diacakis et al. US Patent Pub. No.: 2004/0185875 A1, hereinafter, "**Diacakis**" in view of Duffett-Smith et al. US Patent Pub. No.: 2003/0220117 A1, hereinafter, "**Duffett-Smith**" and further in view of **Roel-Ng** et al US Patent No.: 6,002,936

5. Consider **claims 32 and 47 and as applied to claims 31 and 46**, Sykes as modified by Diacakis and further modified by Duffett-Smith teaches the claimed invention except wherein said set of values comprises at least one value selected from CPICH RSCP, PCCPCH RSCP, GSM carrier RSSI, RTT in FDD, Rx Timing Deviation in TDD, SFN-SFN, RXLEV, and TA.

However, In analogous art Roel Ng teaches wherein said set of values comprises at least one value selected from TA (**i.e., with three TA values from three BTS , the location of the MS can be determined ...col. 2 lines 57-61 and col. 6 lines 43-50**).

Therefore, it would have been obvious to a person of ordinary skill in the art the time the invention was made to modify Sykes as modified by Diacakis and further modified by Duffett-Smith to include wherein said set of values comprises at least one value selected from TA for the purpose of determining an optimum positioning method as taught by Roel Ng.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES SHEDRICK whose telephone number is (571)272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles Shedrick/
Examiner, Art Unit 2617

/LESTER KINCAID/
Supervisory Patent Examiner, Art Unit 2617